

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-6 (Cancelled).

7. (Currently Amended) A data transmission method, comprising:

transmitting a CDMA-coded data signal between a transmitter and a receiver in the form of a data stream of spread data bursts using hierarchical CDMA codes, each of the hierarchical CDMA codes being formed from a mother code by Kronecker multiplication using at least one generator, wherein a spreading factor for the mother code is smaller than a spreading factor for a corresponding hierarchical CDMA code;

detecting data corresponding to a the mother code of at least one of the codes;

despreading the detected data by inverse Kronecker multiplication using the at least one generator; and

aborting the detecting if the data has been despread to a sufficient the extent that received data is produced, otherwise repeating the despreading step with the most recently despread data; and

repeating the despreading step using the data last despread if the data has not been despread to the sufficient extent to obtain receiving data.

8. (Previously Presented) The method according to claim 7, wherein the detecting step includes detecting the data using a rake receiver, and wherein the despreading step includes despreading the detected data using a despreading device connected downstream from the rake receiver.

9. (Previously Presented) The method according to claim 8, further comprising:

performing a preliminary despreading operation in the rake receiver.

10. (Previously Presented) The method according to claim 7, wherein the detecting step includes detecting the data using a joint detection receiver configured to eliminate mutual interference of transmitted data, and wherein the despreading step includes despreading the detected data using a despreading device connected downstream from the joint detection receiver.

11. (Previously Presented) The method according to claim 10, further comprising:

performing a preliminary despreading operation in the joint detection receiver.

12. (Currently Amended) A device for receiving a CDMA-coded data signal transmitted in the form of a data stream of spread data bursts using hierarchical CDMA codes, each of the hierarchical CDMA codes being formed from a mother code by Kronecker multiplication using at least one generator, wherein a spreading factor for the mother code is smaller than a spreading factor for a corresponding hierarchical CDMA code, comprising:

a first stage configured to detect spread data according to a the mother code of at least one of the codes; and

a second stage downstream from the first stage configured to despread the detected data by inverse Kronecker multiplication using the at least one ~~or more generators~~ generator, the second downstream stage being configured to: a) abort detection if the data has been despread to a sufficient ~~the~~ extent that received data is produced; and b) otherwise to repeat the despreading using the data last despread until the data has been despread to the sufficient extent to obtain that receiving received data is produced.